

2013

Investigating opportunities for enhancing farmer adoption of strategically targeted prairie strips in Iowa

J. Gordon Arbuckle R.
arbuckle@iastate.edu, arbuckle@iastate.edu

Drake Larsen
Practical Farmers of Iowa

Tricia G. Knoop
Wisconsin Department of Natural Resources

John Tyndall
Iowa State University, jtyndall@iastate.edu

Emily Sorensen
Iowa State University

Follow this and additional works at: http://lib.dr.iastate.edu/leopold_grantreports

 Part of the [Natural Resources and Conservation Commons](#), [Natural Resources Management and Policy Commons](#), [Rural Sociology Commons](#), and the [Water Resource Management Commons](#)

Recommended Citation

Arbuckle, J. Gordon R.; Larsen, Drake; Knoop, Tricia G.; Tyndall, John; and Sorensen, Emily, "Investigating opportunities for enhancing farmer adoption of strategically targeted prairie strips in Iowa" (2013). *Leopold Center Completed Grant Reports*. 435. http://lib.dr.iastate.edu/leopold_grantreports/435

This Article is brought to you for free and open access by the Leopold Center for Sustainable Agriculture at Iowa State University Digital Repository. It has been accepted for inclusion in Leopold Center Completed Grant Reports by an authorized administrator of Iowa State University Digital Repository. For more information, please contact digirep@iastate.edu.

Investigating opportunities for enhancing farmer adoption of strategically targeted prairie strips in Iowa

Abstract

Project researchers conducted in-depth interviews with a broad range of stakeholders from state agricultural and environmental groups and agencies. The research identified perceived barriers to adoption and gained stakeholder feedback on practical steps that might be taken to surmount those barriers and broaden awareness of and support for the technology.

Keywords

Sociology, Natural Resource Ecology and Management, Conservation practices, Policy, Watershed and ecoregion

Disciplines

Natural Resources and Conservation | Natural Resources Management and Policy | Rural Sociology | Water Resource Management



Investigating opportunities for enhancing farmer adoption of strategically targeted prairie strips in Iowa

Abstract:

Researchers on this one-year planning grant interviewed a range of Iowa citizens and looked for ways to encourage more farmers and stakeholders to consider adopting prairie strips as a targeted conservation practice.

Principal Investigator:

J. Gordon Arbuckle, Jr.
Sociology
Iowa State University

Co-investigators:

Drake Larsen
Practical Farmers of Iowa
Ames

Tricia Knoot

Wisconsin Department of
Natural Resources
Madison, WI

John Tyndall

Natural Resource
Ecology and
Management
Iowa State University

Research Assistant:

Emily Sorensen

Budget:

\$15,000 for year one

Q What do stakeholders believe about prairie strips' prospects to become a widespread conservation practice? How can organizational support for farmer adoption of strips be increased? What ideas do stakeholders have regarding demonstration and other strategies for building support among the agricultural community?

A Project researchers conducted in-depth interviews with a broad range of stakeholders from state agricultural and environmental groups and agencies. The research identified perceived barriers to adoption and gained stakeholder feedback on practical steps that might be taken to surmount those barriers and broaden awareness of and support for the technology.

Background

Based on recommendations from a 2011 meeting of stakeholders in the Science-based Trials of Rowcrops Integrated with Prairies (STRIPs) program, the investigators proposed this research project. The purpose was to examine and evaluate two needs cited by the stakeholders: 1) identify and leverage existing roles and relationships to build the concept of multi-functionality and importance of targeted conservation into current programs and partnerships, and 2) identify available physical and social infrastructure (e.g., learning farms, conservation programs, watershed groups) and communication networks that may be used to promote the adoption of prairie strips. Three key research questions were:

1. What do key stakeholders believe about the potential for targeted prairie strips to become a widespread conservation practice in Iowa?
2. What are some practical steps that might facilitate the cultivation of broad support for incorporating targeted prairie strips into the Iowa landscape?
3. What ideas do they have regarding potential demonstration sites that could be part of a strategy for improving the visibility of prairie strips and building support among the natural resource management and agricultural community?

Approach and methods

The research activity consisted primarily of in-depth interviews. Many of the interview participants had been involved with the STRIPs project as members of the "stakeholder group" comprised of individuals representing the Iowa Department of Agriculture and Land Stewardship (IDALS), the Iowa Department of Natural Resources (IDNR) and the Iowa Farm Bureau Federation (IFBF) who attended annual meetings or were otherwise involved in the project. Other participants were selected for interviews based on their knowledge of Iowa's conservation programs



P O L I C Y



Summer 2012 STRIPS stakeholder meeting.

and activities and potential roles as supporters of expanding prairie strip use across the state. Twenty-two individuals from these organizations were interviewed or observed in meetings:

- Conservation Districts of Iowa
- Iowa Corn Growers
- Iowa Department of Agriculture and Land Stewardship
- Iowa Department of Natural Resources
- Iowa Farm Bureau Federation
- Iowa Natural Heritage Foundation
- Iowa Soybean Association
- Natural Resources Conservation Service
- Practical Farmers of Iowa
- The Nature Conservancy

Thirteen in-depth interviews were conducted by phone and in person. These interviews were recorded and transcribed. In other cases, interviews were held with groups of stakeholders and notes were taken.

Results and discussion

These were some of the themes that emerged from the interviews:

Perceived benefits of prairie conservation strips. Each interview focused on familiarity with the project and perceptions regarding the relative merits of the prairie conservation strips as a conservation practice. Almost all participants offered enthusiastic praise of both the project and the practices. Participants appreciated the wide range of conservation benefits observed in the STRIPs project. The benefits mentioned most frequently were reductions in water flow and soil and nutrient loss. Other benefits cited were increased habitat and wildlife, greater plant diversity on the landscape and lower costs and flexibility relative to more expensive structural practices. The wide range of potential benefits that were cited underscored the broad appeal of the practice to a wide range of stakeholders.

Potential barriers. A central project objective was to assess stakeholder views regarding potential barriers to adoption of the prairie conservation strips, and ways to overcome such barriers. Among the barriers to adoption most often cited by participants were: (1) the opportunity costs associated with taking land out of crop production, (2) incompatibility of the practice with current farming systems and (3) concerns about conservation agency capacity to provide technical assistance.

Pathways for promotion. The interviewers also asked participants to share their thoughts about likely pathways for encouraging widespread adoption of prairie conservation strips. Participants focused on (1) the potential for prairie conservation strips to provide income to the farm operation, (2) a need to develop sources of financial support (cost-share) to help offset the establishment and opportunity costs of the practice, (3) a need to better understand and articulate the long-term benefits (both on-farm and off) of the practice and (4) the use of demonstration sites to increase awareness and eventual adoption of the practice. The need for demonstration sites was emphasized by most interview participants: stakeholders want to see prairie conservation strips perform in varied landscapes and believe that such



Summer 2012 STRIPS stakeholder meeting.

demonstrations are valuable to encourage acceptance of the practice among farmers, landowners, and conservation agencies and organizations. Participants recommended that the STRIPs team raise awareness by disseminating information through the farm press, commodity groups, watershed groups, conservation NGOs and other interested groups. Finally, it was recommended that future research examine how prairie conservation strips fit within natural resource professionals' existing "toolkit," and how that fit might be improved.

Conclusions

The project attained its main objectives. It engaged a broad range of stakeholders from state agricultural and environmental groups and agencies to assess perspectives regarding the potential for prairie conservation strips to become a widespread conservation practice in Iowa. It identified perceived barriers to more widespread adoption of the practice, and gained stakeholder feedback on practical steps that might be taken to surmount those barriers and broaden awareness of and support for the technology.

This research project documented the perspectives of some key stakeholders, and it is hoped that those findings will be instrumental in moving the STRIPs project forward. However, it also pointed to gaps in knowledge and opportunities for future research. The project focused primarily on administrators from key agencies and organizations because understanding their perspectives about prairie conservation strips is critically important to any effort to promote the strips across the state. Nevertheless, field staffers from these agencies and organizations interact directly with farmers and landowners. Future research should examine their perspectives on how the prairie conservation strips fit within their existing "toolkit," and how to improve that fit.

Impact of results

The results of this research will inform the work of the STRIPs research team (www.leopold.iastate.edu/strips-research-team) as they continue their efforts to move prairie conservation strips from research plots to farm fields. By documenting stakeholder perceptions of the practice's benefits, barriers to widespread use, and pathways for promotion, the project identified numerous opportunities and leverage points to help in the development of strategies that lead to broader awareness of the prairie strips technology and eventual adoption across Iowa's agricultural landscape. (See www.prairiestrips.org for more information.)

Leveraged funds

No additional funds were leveraged by this project.

For more information, contact:

*J Gordon Arbuckle,
Jr., Sociology, 303C
East Hall, Iowa State
University, Ames, IA
50011-1070; (515) 294-
1497, e-mail arbuckle@iastate.edu*